Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be

unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure

consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given by Andrew J. Lagatta, Reg. No. 62,529

on October 15, 2009.

The application is amended as followed:

Claims

1. (Currently Amended) A method of selecting a data signal source from amongst a plurality of

potential sources, the method comprising:

(a) selecting a source from amongst the plurality of potential sources;

(b) enabling directional connection between the source and a physical interface using a biasing

switch;

(c) monitoring the source selected in step (a) at a programmable logic device for an indication of

communication speed, wherein monitoring the source includes monitoring for an indication of a normal

link pulse, a multi-level tier 3 pulse, and a fast link pulse received at the programmable logic device via a

tri-state converter, the tri-state converter communicating to the programmable logic device a two-bit

digital signal, each bit being carried on a separate line, indicating communication speed derived from a

tri-state signal provided by the physical interface;

(d) returning to step (a) if no indication of communication speed is observed; and

(e) maintaining selection of the source of step (a) if an indication of communication speed is

observed.

6. (Currently Amended) A method of selecting a data signal source from amongst a plurality of potential sources, the method comprising:

(a) selecting a source from amongst the plurality of potential sources;

(b) enabling directional connection between the source and a physical interface using a biasing switch;

(c) monitoring the source selected in step (a) at a programmable logic device for an indication of an ensuing autonegotiation period, wherein monitoring the source includes monitoring for an indication of a normal link pulse, a multi-level tier 3 pulse, and a fast link pulse received at the programmable logic device via a tri-state converter, the tri-state converter communicating to the programmable logic device a two-bit digital signal, each bit being carried on a separate line, indicating communication speed derived from a tri-state signal provided by the physical interface;

(d) waiting for expiration of the ensuing autonegotiation period;

(e) returning to step (a) if after expiration of the autonegotiation period, no indication of communication speed is observed; and

(f) maintaining selection of the source previously selected in step (a) if after expiration of the autonegotiation period, an indication of communication speed is observed.

11. (Currently Amended) A method of selecting a data signal source from amongst a plurality of potential sources, the method comprising:

(a) selecting a source from amongst the plurality of potential sources;

(b) enabling directional connection between the source and a physical interface using a biasing switch;

(c) monitoring the source selected in step (a) at a programmable logic device for an indication of communication speed or an ensuing autonegotiation period, wherein monitoring the source includes

monitoring for an indication of a normal link pulse, a multi-level tier 3 pulse, and a fast link pulse

received at the programmable logic device via a tri-state converter, the tri-state converter communicating

to the programmable logic device a two-bit digital signal, with each bit being carried on a separate line,

indicating communication speed derived from a tri-state signal provided by the physical interface;

(d) returning to step (a) if no indication of communication speed or an ensuring autonegotiation

period is observed;

(e) maintaining the selection of step (a), if an indication of communication speed is observed;

(f) waiting for expiration of the ensuing autonegotiation period, if an indication of an ensuing

autonegotiation period is observed;

(g) returning to step (a) if after expiration of the autonegotiation period, no indication of

communication speed is observed; and

(h) maintaining selection of the source previously selected in step (a) if after expiration of the

autonegotiation period, an indication of communication speed is observed.

19. (Currently Amended) A method for a media converter to identify which of two pairs of pins

on a data jack is carrying a data signal sent from a network device, wherein the media converter includes

a physical interface having an input port into which the data signal from the network device is to be

supplied, and wherein the media converter further includes a switch interposed between the data jack and

the physical interface and at least one biasing switch enabling a directional connection between the

physical interface and the data jack, the method comprising:

using the switch and the biasing switch to alternately couple the input port on the physical

interface between a first pair of pins on the data jack and a second pair of pins on the data jack;

monitoring a pair of pins coupled to the input port of the physical interface for an indication of

[[the]] a speed at which the network device will communicate, the pair of pins corresponding to at least

one of the first pair of pins and the second pair of pins, wherein monitoring the pair of pins includes

monitoring for a normal link pulse, a multi-level tier 3 pulse, and a fast link pulse using a programmable

logic device, the programmable logic device receiving the indication of the communication speed via a

tri-state converter, the tri-state converter communicating to the programmable logic device a two-bit

digital signal, with each bit being carried on a separate line, indicating the communication speed derived

from a tri-state signal provided by the physical interface;

upon determining the communication speed, ceasing to alternately couple the physical interface

between the first pair of pins on the data jack and the second pair of pins on the data jack.

27. (Currently Amended) A media converter comprising:

a switch having a first end and a second end, the first end capable of coupling to any of a plurality

of potential sources of a data signal, the second end coupled to an input port of an physical interface that

converts the data signal from a signal that propagates along a first medium to a signal that propagates

along a second medium;

at least one biasing switch enabling a directional connection between the physical interface and a

selected source from among the plurality of potential sources;

an optical transceiver coupled to the physical interface;

a programmable logic device coupled to the physical interface via tri-state converter;

wherein the programmable logic device is arranged to

cause the switch to iteratively couple a first end of the switch to each of the plurality of potential

data sources on a one-by-one basis, until instructed to cease such iterative coupling by the programmable

logic device;

receive a signal from the physical interface, the signal communicating a data rate at which the

data signal will be communicated; and

upon reception of the signal communicating the data rate at which the data signal will be

communicated, instruct the switch to cease iterative coupling;

wherein the signal communicating a data rate at which the data signal will be communicated is a

two-bit digital signal <u>with each bit being carried on a separate line</u> derived <u>by the tri-state converter</u> from

a tri-state signal provided by the physical interface.

37. (Currently Amended) A media converter comprising:

a switch having a first end and a second end, the first end capable of coupling to any of a plurality

of potential sources of a data signal, the second end coupled to an input port of a physical interface that

converts the data signal from a signal that propagates along a first medium to a signal that propagates

along a second medium;

at least one biasing switch enabling directional connection between the physical interface and the

plurality of potential sources;

an optical transceiver coupled to the physical interface;

a tri-state converter configured to convert a tri-state signal provided by the physical interface to a

two-bit digital signal<u> with each bit being carried on a separate line</u>, the two-bit digital signal identifying a

data rate at which the data signal will be communicated; and

~~means for controlling~~ <u>a programmable logic device to control</u> the switch so as to couple the input

port of the physical interface to one of the plurality of potential ~~data~~ sources actually carrying a data

signal;

wherein the physical interface detects a data rate of the data signal.

38. (Currently Amended) A network arrangement comprising:

a media converter including:

a switch having a first end and a second end, the first end capable of coupling to any of a plurality

of potential sources of a data signal, the second end coupled to an input port of a physical interface that

converts the data signal from a signal that propagates along a first medium to a signal that propagates

along a second medium;

a least one biasing switch enabling a directional connection between the physical interface and

the plurality of potential sources;

an optical transceiver coupled to the physical interface;

a tri-state converter configured to convert a tri-state signal converted by the physical interface to a

two-bit digital signal, with each bit being carried on a separate line, communicating a data rate at which

the data signal will be communicated;

~~means for controlling~~ a programmable logic device to control the switch so as to couple the

import port of the physical interface to one of the plurality of potential data sources actually carrying a

data signal;

wherein the physical interface detects a data rate of the data signal;

a first network device coupled via the first medium to the switch within the media converter; and

a second network device coupled via the second medium to the optical transceiver within the

media converter.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Joshua Joo who telephone number is 571 272-3966. If attempts to reach the examiner by

telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915.

/J. J./
Examiner, Art Unit 2454

/NATHAN FLYNN/

Supervisory Patent Examiner, Art Unit 2454